

## AB204. Life-long suppression antibiotics resulting in pathogen selection: thoracic endovascular aortic repair in the treatment of aorto-bronchial fistula

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**Background:** Endograft infection after thoracic endovascular aortic repair (TEVAR) is a feared complication. Increasing utilisation of TEVAR has resulted in more cases being documented with a mortality rate as high as 70% Aorto-bronchial fistula is a common presentation and is strongly associated with a poor prognosis while the most commonly isolated organisms are streptococcus and staphylococcus. Cases of fungal endograft infection are extremely rare in both a thoracic and abdominal aortic setting.

**Methods:** We report the case of a 63-year-old male who presented with progressively shortening claudication distance on a background history of previous TEVAR for a thoracic aortic aneurysm. In regards to his original intervention, he had presented with acute large volume haemoptysis 5-years prior wherein he underwent TEVAR with left common carotid to left subclavian artery bypass. In the setting of an aorto-bronchial fistula, he was referred to infectious diseases with life-long suppression antibiotics commenced.

**Results:** Following re-admission, computed tomography revealed the development of hyper dense material within the luminal aspect of the thoracic stent while Positron Emission Tomography revealed avid uptake indicative of active infection. Clinical deterioration despite antibiotic coverage led to the decision to proceed with an extraanatomical bypass (ascending aorta to the descending aorta) with removal of the thoracic stent. Subsequent microbiology revealed aspergillus fumigatus as the causative organism.

**Conclusions:** Aorto-bronchial fistula is associated with poorer outcomes in TEVAR while life-long suppression antibiotic may result in the selection of fungal pathogens as the causal organism.

Keywords: Aorto-bronchial fistula; aspergillus fumigatus; thoracic endovascular aortic repair

## doi: 10.21037/map.2020.AB204

**Cite this abstract as:** Barry I, Bond R. Life-long suppression antibiotics resulting in pathogen selection: thoracic endovascular aortic repair in the treatment of aorto-bronchial fistula. Mesentery Peritoneum 2020;4:AB204.